

REMARKS

The Office Action dated May 8, 2007 has been received and carefully noted. The above amendments to the drawings and claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-45, and 60-61 were pending and under consideration. Claims 46-59 and 62-71 were withdrawn from consideration by the Office Action. By this Response, claims 1-2, 5-6, 9, 16, 22, 24, 30-31, 43, 45, and 61 have been amended to more particularly point out and distinctly claim the subject matter of the invention. New claims 72-74 have been added to further complete the scope of protection to which Applicant is entitled. No new matter has been added. Accordingly, claims 1-45, 60-61, and 72-74 are pending, of which claims 1 and 72-74 are independent claims. Approval and entry of the amendments are respectfully requested.

On page 2 of the Office Action, Figs. 1-3 were objected to as not correctly labeled as prior art. In response, Applicant submits herewith replacement sheets with Figs. 1-3 labeled as prior art. Accordingly, approval and entry of the amendments are respectfully requested.

On page 3 of the Office Action, claims 1, 2, 5, 6, 8, 12-15, 17-22, 45, and 61 were rejected under 35 U.S.C. §102(e) as being anticipated by Aziz et al. (U.S. Patent No. 6,643,701 – hereinafter Aziz). The Office Action contended that Aziz describes all of the claimed features in the rejected claims. In response, Applicant respectfully traverses the

rejection for the reason that Aziz neither discloses nor suggests all of the claimed features.

Independent claim 1, upon which claims 2-45 and 60-61 are dependent, is directed to a communication system having a first node, a second node, and at least one intermediate node between the first and second nodes. The first and second nodes are configured to be in communication, the first and second nodes have a first security association, and one of the at least one intermediate node and the second node have a second security association. Further, the first security association is configured to authenticate the second node to the first node and the second security association is configured to authenticate the at least one intermediate node to the second node.

Independent claim 72 is directed to an intermediate node in a communication system having a first node and a second node, the intermediate node being in between the first node and the second node. The intermediate node is configured to utilize a security association configured to authenticate the intermediate node to the second node, and the first and second nodes are configured to be in communication with one another using another security association configured to authenticate the second node to the first node.

Independent claim 73 is directed to a first node in a communication system having a second node and an intermediate node. The first node is configured to utilize a first security association configured to authenticate the second node to the first node. The second node is configured to utilize a second security association, which is configured to authenticate the intermediate node to the second node.

Independent claim 74 is directed to a second node in a communication system having a first node and an intermediate node. The second node is configured to utilize a security association configured to authenticate the intermediate node to the second node. The second and first nodes are configured to be in communication with one another using a second-to-first node security association configured to authenticate the second node to the first node.

As will be discussed below, each of the presently pending claims recite subject matter which is neither disclosed nor suggested in the cited prior art.

Aziz generally describes a method and apparatus for providing a secure communication with a relay in a network. Fig. 2 of Aziz shows client 200 and relay 220 connected via with a first end-to-end secure transmission link 210. Aziz also shows relay 200 and server 240 connected via a second end-to-end secure transmission link 230.

In the §102(e) rejection over Aziz, the Office Action relied on Fig. 2 and elements 210 and 230 of Aziz as describing Applicant's claimed feature wherein the first and second nodes are arranged to be in communication and the first and second nodes have a first security association and one of the at least one intermediate node and the second node have a second security association. The Office Action further cited col. 1, line 64 to col. 2, line 2 of Aziz as describing Applicant's claimed feature wherein the first security association authenticates the second node to the first node and the second security association authenticates the at least one intermediate node to the second node. However, Applicant respectfully asserts that the transmission links 210 and 230 of Aziz have been

taken out of context, and that there is no equivalence structurally or functionally between the first and second end-to-end security transmission links 210 and 230 of Aziz and Applicant's claimed first security association and second security association.

Applicant respectfully submits that the Office Action failed to consider the claim elements in light of the specification. That is, the teaching in the specification must not be ignored because claims are to be given their broadest reasonable interpretation that is consistent with the specification. Hence, the Office Action failed to follow proper examining guidelines, and the overly broad interpretation of the first and second end-to-end secure transmission links 210 and 230 described in Aziz is inconsistent with the claimed features of "first security association" and "second security association" of the present invention and their support in the specification.

Applicant respectfully directs the Examiner's attention to dependent claims 2-4, for example, where the first and second security associations are further defined as representing at least one certificate for authentication, a cryptographic certificate, and an X.509 certificate. Hence, when taken in proper context, Aziz's first and second end-to-end secure transmission links 210 and 230 bears no structural nor functional similarity to Applicant's claimed the first and second security associations.

In view of the above, Applicant respectfully asserts that Aziz is completely silent regarding any security association that resembles the first security association configured to authenticate the second node to the first node, or the second security association

configured to authenticate the at least one intermediate node to the second node, as recited in claim 1, for example.

Further, in the rejection the Office Action cited claim 3 of Aziz, which describes the end-to-end security links as one of a secure socket layer links and transport layer security links, as support for the contention that the first and second end-to-end secure transmission links of Aziz are equivalent to Applicant's first and second security associations, respectively. However, such a contention is improper because there is no suggestion or motivation in Aziz to include the feature wherein the first security association is configured to authenticate the second node to the first node and the second security association is configured to authenticate the at least one intermediate node to the second node, as recited in present claim 1. As set forth above, there is no suggestion or description in Aziz indicating that the end-to-end secure transmissions 210 and 230 are capable of authenticating in the manners recited in Applicant's claim 1, for example. Accordingly, Applicant respectfully requests reconsideration of withdrawal of the §102(e) rejection of independent claim 1 as its respective depending claims.

On page 6 of the Office Action, dependent claims 7 and 9-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Aziz. The Office Action contended that it would be obvious to have the first node attached to a wireless network, a wireless user equipment, a packet switched network, or a network operating in accordance with GPRS. In response, Applicant respectfully traverses the rejection at least for the reason set forth above in relation the rejection of independent claim 1, from which claims 7 and 9-11

depend. That is, as Aziz fails to teach, disclose, or suggest at least the first security association configured to authenticate the second node to the first node, and the second security association configured to authenticate the at least one intermediate node to the second node, as recited in claim 1 and its dependent claims 7 and 9-11, the §103(a) rejection over Aziz is improper and should be reconsidered and withdrawn.

On page 7 of the Office Action, dependent claims 3, 4, 23-43, and 60 were rejected under 35 U.S.C. §103(a) as being unpatentable over Aziz in view of Dierks et al. (“The TLS Protocol” – hereinafter Dierks). The Office Action applied Dierks as describing the features that are deficient in Aziz. In response, Applicant respectfully traverses the rejection at least for the reasons set forth above in relation to the rejection of independent claim 1, from which claims 3, 4, 23-43, and 60 depend, and for the reason that Aziz and Dierks, combined or separately, fail to teach, disclose, or suggest all of the recitations in the rejected claims.

Dierks is a memorandum from the Network Working Group that generally describes version 1.0 of the Transport Layer Security Protocol. There is no suggestion or motivation in Dierks to include Applicant’s claimed features wherein the first security association is configured to authenticate the second node to the first node and the second security association is configured to authenticate the at least one intermediate node to the second node, as recited in present claim 1. Accordingly, the obviousness rejection of claims 3, 4, 23-43, and 60 over Aziz and Dierks is respectfully requested to be reconsidered and withdrawn.

On page 11 of the Office Action, claim 16, which depends from claim 1, was rejected as being unpatentable over Aziz in view of Immonen et al. (U.S. Patent Application Publication No. 2002/0077993 – hereinafter Immonen). The Office Action cited Immonen as suggesting a gateway operating as a GPRS support node. In response, Applicant respectfully traverses the rejection at least for the reason that Aziz and Immonen, combined or separately, fail to teach, disclose, or suggest all of the recitations in the rejected claim.

Immonen generally describes using Wireless Application Protocol in a method and system for conducting wireless payments. However, there is no suggestion or motivation in Immonen to include Applicant's claimed features wherein the first security association is configured to authenticate the second node to the first node and the second security association is configured to authenticate the at least one intermediate node to the second node, as recited in claim 1. Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 16 over Aziz and Immonen.

On page 12 of the Office Action, claim 44, which depends from claim 1, was rejected under 35 U.S.C. §103(a) as being unpatentable over Aziz and Dierks in view of Immonen. In response, Applicant respectfully traverses this rejection at least for the reasons set forth above. Namely, Aziz, Dierks, and Immonen, combined or separately, fail to teach, disclose, or suggest the feature wherein the first security association is configured to authenticate the second node to the first node and the second security

association is configured to authenticate the at least one intermediate node to the second node, as recited in claim 1.

New independent claims 72-74 also recite security associations that parallel the first and second security associations of claim 1. Hence, the arguments set forth above in relation to the rejection of claim 1 are also applicable to claims 72-74.

As discussed above, Aziz, Dierks, and Immonen, combined or separately, fail to teach, disclose, or suggest all of the features recited in the pending claims. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the pending rejections over Aziz, Dierks, and Immonen.

In view of the above, Applicant respectfully submits that each of the claims 1-45, 60-61, and 72-74 recites subject matter which neither disclosed nor suggested in the cited reference to Aziz, Dierks, and Immonen. It is therefore respectfully requested that these pending rejections be withdrawn, and this application pass to issue with the allowance of pending claims 1-45, 60-61, and 72-74.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Replacement Drawings (2 sheets – Figs. 1-3)
Additional Claim Fee Transmittal